

# Advancements in the Management and Treatment of Spinal Cord Injury

(An Evidence Based Course)



Presented by  
Selina Morgan, PT, ATP

PT, OT, PTA and ATC -  
Continuing Education Course

**North American Seminars, Inc.**  
1-800-300-5512 | Fax 1-800-310-5920  
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Certificates of attendance are provided upon successful completion of the course.

This course is 16.0 contact hours/1.6 CEUs/16 CCU's  
This course is 19.0 contact hours/1.90 CEU's. for therapists licensed in Florida, District of Columbia, New York, or Illinois

## Day One

7:30	8:00	<b>Registration</b>
8:00	8:30	<b>Introduction</b>
		<ul style="list-style-type: none"> <li>• Demographics</li> <li>• Model systems and their contributions</li> <li>• What constitutes a spinal cord injury program</li> </ul>
8:30	9:00	<b>Review of secondary injury mechanisms</b>
		<ul style="list-style-type: none"> <li>• Multisystem involvement</li> <li>• Therapy precautions and interventions</li> </ul>
9:00	9:45	<b>Evaluation with practical applications</b>
		<ul style="list-style-type: none"> <li>• The detailed ASIA assessment</li> <li>• Specific motor testing: isolating each muscle group</li> </ul>
9:45	10:00	<b>Break</b>
10:00	12:00	<b>Evaluation (cont.)</b>
		<ul style="list-style-type: none"> <li>• Isolating muscle groups (cont)</li> <li>• Meeting milestones by strengthening in functional positions</li> </ul>
12:00	1:00	<b>Lunch (on your own)</b>
1:00	2:30	<b>Evaluation of spinal origin spasticity and management</b>
		<ul style="list-style-type: none"> <li>• Assessing spasticity                             <ul style="list-style-type: none"> <li>- Observation</li> <li>- Reliable tools for assessment</li> </ul> </li> <li>• Systemic treatment through medications (ITB, medications)</li> <li>• Localized treatment (injection therapy)</li> <li>• Management through seating and positioning</li> <li>• Therapy interventions</li> </ul>
2:30	2:45	<b>Break</b>
2:45	4:00	<b>Weight bearing and augmentative movement therapies</b>
		<ul style="list-style-type: none"> <li>• Recovery model vs. conventional model</li> <li>• Benefits of standing</li> <li>• FES technologies for the extremities and for mobility</li> <li>• Bioprosthetics</li> </ul>
		<b>Central Generator processors</b>
		<ul style="list-style-type: none"> <li>• Harnessed gait training (tread mills and robotics)</li> <li>• Specificity of training</li> </ul>
4:00	5:00	<b>Introduction to basic functional training</b>
		<ul style="list-style-type: none"> <li>• Kinesthetic analysis of movement</li> <li>• Video case study-dressing/mobility</li> </ul>
5:00	5:30	<b>Review and questions</b>

## Day Two

7:00	8:30	<b>Functional training</b>
		<ul style="list-style-type: none"> <li>• Utilizing your evaluation findings for goal setting</li> <li>• Splinting strategies</li> <li>• Review of expected outcomes for basic skill progressions relative to mobility and ADL's</li> </ul>
8:30	10:30	<b>Handling lab: Mobility training discussion and demonstration</b>
		<ul style="list-style-type: none"> <li>• Functional training progressions and handling skills</li> <li>• Kinesthetic analysis of movement patterns</li> <li>• Wheelchair evaluation preliminary thoughts and patient measurements</li> <li>• Video analysis</li> </ul>
10:30	10:45	<b>Break</b>
10:45	12:00	<b>Seating and mobility</b>
		<ul style="list-style-type: none"> <li>• Assessing for function, skin protection, and deformity management</li> <li>• The ergonomics of manual propulsion</li> <li>• Rigid vs. folding frames vs. hybrids</li> <li>• Configuration options</li> <li>• Manual propulsion enhancement</li> </ul>
12:00	1:00	<b>Lunch (on your own)</b>
1:00	2:45	<b>Seating and mobility (cont)</b>
		<ul style="list-style-type: none"> <li>• Power mobility and alternative access/switch driving assistive technology                             <ul style="list-style-type: none"> <li>- Electronic aids to daily living</li> <li>- Computer access</li> <li>- Augmentative communications</li> <li>- Driving and transportation</li> <li>- Funding trends</li> <li>- Credentialing trends for prescriptive complex mobility systems</li> </ul> </li> </ul>
2:45	3:00	<b>Break</b>
3:00	4:15	<b>Home modifications and DC planning</b>
		<ul style="list-style-type: none"> <li>• Home modifications, prioritizing for the discharge from rehab</li> <li>• Internal and external analysis of the living and working environment</li> </ul>
4:15	4:30	<b>Wrap up and post test</b>

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1-800-300-5512

# About the Educator

**Selina M. Morgan, PT, ATP** graduated from Texas A&M University with a BS in Health Education in 1984, and the University of Texas Health Science Center in Dallas, School of Physical Therapy in 1986. She has been actively involved in the physical rehabilitation of neurological compromised patients with a special interest in spinal cord injury and assistive technology. She works in both the pediatric and adult spinal cord injury populations; in both post acute and chronic stages. Her extensive years of experience have yielded intriguing strategies in all age groups and paralysis presentations that works to encourage functional independence and strength recovery. She has held offices in: The National Spinal Cord Injury Association-South Texas Chapter; the ad hoc committee to improve accessibility in San Antonio; and the Access Planning Committee of the Alamo Dome. Selina first gained her teaching experience through her faculty position at the Texas Tech School of Physical Therapy in 1995. She continues to teach in the areas of spinal cord injury, seating/mobility and assistive technology and the University of Texas Health Science Center at San Antonio (schools of PT and OT), and the Army Baylor School of Physical Therapy at Fort Sam Houston. Selina is credentialed by RESNA as an Assistive Technology Professional since 2003.

# Why You Should Attend This Course

This two-day advanced course is designed to provide progressive concepts to the medical professional involved in the rehabilitation management of the spinal cord injured patient. In today's rehabilitation environment, therapists are being driven to be more aggressive toward utilizing a recovery model approach when treating a patient following a spinal cord injury. The basic skills learned in conventional model therapy are important but no longer enough to promote a higher level of recovery. Today's research based approaches, enable therapists to offer aggressive treatment with the focus on regaining the function that has been lost. Expecting a higher level of functional outcome requires a paradigm shift in our traditional thought process.

The focus of discussion in this course will be on current treatment approaches related to SCI rehabilitation. Special emphasis will be placed on specific evaluation skills using ASIA and ISCoS standards and more specific evaluation procedures for setting long term functional expectations. A review of precautions and secondary injury mechanisms will be discussed with a deeper focus on spasticity management including assessment tools, identifying neural vs. non-neural origins of spasticity, and advances in local and systemic medical intervention. Participants will also be exposed to state of the art information to enhance their understanding of the treatment environment for the spinal cord injured population including the use of static and dynamic standing programs, augmentative movement therapies; and assistive gait intervention stimulating central generating processors. This course will explore both conventional and high-tech methods of achieving the best possible outcome and will assist the clinician in facilitating critical thinking when assisting their clients in achieving independent living and long term self management.

Clinicians will be able to immediately apply the information from this course in the clinical setting and will be able to significantly impact the care of their patients by understanding the availability of current resources for the spinal cord injured patient.

## Course Objectives

Upon completion of this course, participants will be able to:

- Review the historical trends in SCI therapy, contributions from the model systems and what constitutes a spinal cord therapy program
- Identify key components to therapy evaluation and indications for treatment planning
- Differentiate between the ASIA/ISCoS evaluative process and a more specific evaluation based on recognizing specific muscle groups' strength and compensatory contributions.
- Discuss differences in philosophy relative to treatment approaches utilizing a traditional therapy model vs. the more aggressive recovery model.
- Will be able perform a kinesthetic analysis of movement patterns and strategize mobility options.
- Discuss key issues related to evaluating spasticity and current trends in its management.
- Review the secondary injury mechanisms and therapy precautions/interventions.
- Discuss and apply the principles of seating, positioning and functional mobility.
- Explore environmental and computer access options.
- Discuss funding issues as they relate to procurement of assistive technology and mobility equipment.

## Registration Form

Name \_\_\_\_\_ Profession \_\_\_\_\_

Home \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Credit Card \_\_\_\_\_

Exp.date \_\_\_\_\_ Home Phone (required) \_\_\_\_\_

e-mail (required) \_\_\_\_\_

Location of attendance \_\_\_\_\_

All cancellations must be submitted with written notice and received 14 days prior to the course date. Refunds and transfers minus the deposit fee of \$75.00 are provided until 14 business days prior to the course date. No refunds will be issued if notice is received after 14 days prior to the course date. North American Seminars, Inc. reserves the right to cancel any course and will not be responsible for any charges incurred by the registrant due to cancellation. A full course tuition refund will be issued if NAS cancels the course. NAS reserves the right to change a course date, location or instructor. No refund will be issued if course is in progress and is interrupted by an Act of War or God or issue beyond our control. NAS, Inc. will not be responsible for any participant expenses other than a course tuition refund for course cancellations.